

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET
(pursuant to NAC 445A.236)

Permittee Name: City of Fernley
Public Works Department
Fernley East Wastewater Treatment Facility (FEWWTF)
595 Silver Lace Boulevard
Fernley, NV 89408

Permit Number: NEV80011

Location: East of the City of Fernley, on East Newlands Drive

Latitude: 39° 36' 38" N.
Longitude: 119° 11' 03" W.
Section 9, T. 20N., R. 25E. MDB&M

Discharge Description: Wastewater from the City of Fernley is treated at the FEWWTF which consists of a series of six partial mix aerated facultative lined lagoons. Pond # 1 is currently off-line for sludge removal, liner inspection, and repair if needed. Flows enter the plant from the East Wastewater Lift Station where the flow is recorded by a magnetic flow meter, screened and delivered via forcemain to the facility where it passes through a splitter box which delivers the wastewater over weirs into pond 1a, 1b, (4.19 acres each, 7' deep); pond 3a, 3b, (3.86 acres each, 10.5' deep); and 4a, 4b, (3.86 acres each, 10.5' deep). Ponds 1a and 1b currently are off-line, and will be put back into service when maintenance is concluded. The three dual cell ponds are designed to be operated in parallel to meet the optimal design capacity of 3.05 MGD. Flows may also be directed either to pond #2 (8.45 acres, 5' deep) for storage if needed, or to the rapid infiltration basins (emergencies only). Routine discharges are directed to the effluent meter outfall structure then via the cascade aerator directly into the Fernley Wildlife Management Area for landscape irrigation reuse. Alternate disposal is via evaporation/percolation in the Rapid Infiltration Basin, or the storage pond # 2 via evaporation. Groundwater lies about twenty five feet below ground surface.

Flow: The flow will be limited as follows: Phase I, 2.20 MGD, 30-Day Average for disposal to the Fernley Wildlife Management Area (FWMA), and Phase II, subject to review and approval by Technical Services Branch, 3.05 MGD, 30-Day Average, no limit on daily maximum..

Monitoring Requirements:

The Permittee will be required to monitor for:

Influent Flow, and Effluent Flows discharged to the FWMA, Storage Pond #2, and the Rapid Infiltration Basins.

Influent and Effluent CBOD₅ - Twice Monthly - Effluent limit 30 mg/l 30-Day Average and 45 mg/l Daily Maximum.

Influent and Effluent TSS - Monthly - Effluent limit 90 mg/l Daily Maximum

Dissolved Oxygen: - No limit, Monthly 001

Effluent pH - Monthly - not less than 6.0 nor more than 9.0 Standard Units.

Effluent Total Phosphorus as P - Monthly - no limit

Effluent Total Nitrogen as N - Monthly - no limit

Effluent Fecal Coliform to FWMA(Outfall 001) - Monthly - 200 CFU/100 ml 30 Day-Average and 400 CFU/ml Daily Maximum.

Chlorine Residual to Outfall 001 - Monthly - no limit

WET test - once if indicated, for Daphnia only, prior to chlorination Outfall 001

Priority Pollutants(8240), plus metals - 4th Quarter - at Effluent meter vault.

Groundwater Monitoring - Wells: 1,2,3, and 6.

Total Nitrogen

as N: - 10 mg/L

Nitrates: - Once per quarter - per Part I.A. 14. of permit

Depth to groundwater and Groundwater elevation: - Once per quarter

Chlorides: - Once per quarter - No limit.

TDS : - Once per quarter - No limit.

General: *The Fernley East Wastewater Treatment facility has been upgraded and expanded to allow increased flows to meet the needs of the rapidly growing community of Fernley. The option of discharging to the Fernley Wildlife Management Area (Outfall 001) via the cascade aerator for the reuse of effluent will benefit wildlife propagation with the irrigation of native plant materials. Other disposal options are the Rapid Infiltration Basins (Outfall 003) and storage pond # 2 (Outfall 002). Agreements have been made between Fernley Utilities and the US Bureau of Reclamation and the Nevada Department of Wildlife to allow this land use and to operate the Fernley Wildlife Management Area reuse activities. NDOW is permitted for reuse of the treated effluent water on site (NEV98008).*

Receiving Water Characteristics: *The receiving waters are the waters of the State. The groundwater in the immediate area of the treatment facility is of poor quality with a total dissolved solids concentration of over 2000 mg/l. Ground water quality will be monitored to detect any adverse impacts.*

Currently elevated nitrates (20-24 mg/L) in monitoring well #1 near pond #1 has initiated taking the pond out of service, the draining of the pond, the sludge removal and the liner inspection for leaks. If damaged it will be repaired or replaced before being put back on-line. Ancillary piping will also be inspected to determine if there are

any leaks.

Procedures for Public Comment:

*The notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Fernley Leader-Dayton Courier and the Reno Gazette-Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice, by June 4, 2007. The comment period can be extended at the discretion of the Administrator.*

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of U.S. EPA Region IX or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing scheduled by the Administrator must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination

The Division has made the tentative determination to reissue the proposed permit for a 5-year period.

Rationale for Permit Requirements

Monitoring is required to assess the level of treatment being provided, to determine when design capacity is being approached and to ensure that the Fernley Wildlife Management Area will not be degraded. Limits are based on secondary treatment requirements, the plant's capability to treat wastewater, and site specific requirements related to the nature of the reuse disposal area, and the enhancement of wetland vegetation and the waterfowl habitat in the Fernley Wildlife Management Area.

